

INTEGRATED CURRICULUM

The MD-PhD Dual Degree Program brings together the best of both worlds at UTMB and UT Austin. The innovative Medical School curriculum at UTMB is an integrated, system-based curriculum which emphasizes problem-based learning. The focus is on small group, self-directed study. During this phase of biomedical training, special seminars and graduate level courses introduce students to the process of research. Opportunities for research rotations at UT Austin are available during the summers before starting the medical coursework and between the first and second years of medical school curriculum.

For PhD training, the curriculum is contingent upon the graduate program selected. Biomedical Engineering, Biochemistry, Cell and Molecular Biology, Chemistry, or Neuroscience each provide courses specific to the area of research.

Students continue to acquire medical knowledge during the research years through clinical experiences with UTMB Austin medical faculty and a specialized series of seminars in translational medicine. This process helps prepare students for clinical clerkships. Completion of the PhD dissertation signals the start of the final portion of training in clinical medicine. Clinical rotations are available in Austin and Galveston.

Year 1: Medical School learning modules are enriched by a series of small group conferences that explore the process by which new medical knowledge is acquired. The summers before and after the first year are spent in research lab rotations at UT Austin.

Year 2: Complete Medical School learning modules, including Practice of Medicine II. U.S. Medical Licensure Exam Step 1 is taken at the end of this year. A third research rotation is available in the summer or, if a laboratory has been identified, dissertation research may begin at UT Austin.

GRADUATE DEGREE PROGRAMS

Biomedical Engineering www.bme.utexas.edu

The Biomedical Engineering program utilizes the fundamentals of engineering and science as they relate to medicine, and performs multi-disciplinary, disease-oriented research at the molecular and cellular levels. The goal of the Biomedical Engineering graduate program is to integrate molecular and cellular biology and engineering research to develop new diagnostic tools and treatments for human diseases.

Biochemistry www.cm.utexas.edu

The biochemistry graduate program brings together traditional areas of biochemical research such as structural biology, enzymology and metabolism but also emerging disciplines of systems and synthetic biology, metabolomics/metabolic engineering structure based pharmaceutical design and the application of these disciplines to clinical problems.

Cell and Molecular Biology www.icmb.utexas.edu/cmb

The Cell and Molecular Biology graduate program includes research faculty from over 17 academic departments in the Colleges of Natural Science, Engineering and Pharmacy. Among the disciplines are biochemistry, bioinformatics, biomedical engineering, bio-organic chemistry, computational biology, cell biology, developmental biology, medicinal chemistry, microbiology, molecular biology, nanotechnology, neurobiology, pharmacology and physics. The faculty are highly interdisciplinary, conducting basic and biomedical research.

Year 3: Graduate courses specific for graduate program and area of research chosen. Comparable Medical School courses and Graduate Seminars at UTMB can substitute for UT Austin graduate course requirements on a case-by-case basis. Dissertation research

begins. The graduate preliminary examination is offered in the spring if all course prerequisites are completed. Clinical experiences at UTMB-Austin campus and Seminars in Translational Research begin.

Chemistry www.cm.utexas.edu

The Chemistry graduate program offers unsurpassed opportunities for research across a broad range of traditional areas of chemical research, as well as interface disciplines of chemical biology, drug synthesis, diagnostic design, new instrumentation for diagnostics, nanotechnology and material sciences. The new Texas Institute for Drug and Diagnostics Development (TI3D) offers a unique opportunity to participate in the development of new treatments from the design phase through synthesis and early efficacy testing.

Neuroscience neuroscience.utexas.edu

The Neuroscience graduate program brings together numerous faculty from twelve departments on campus with the common interest of attaining a better understanding of the critical role of the nervous system in health and disease. Areas of research offered to MD/PhD students include molecular neurobiology, neuroanatomy, neurophysiology, neuropharmacology, neural systems analysis, biophysics, imaging, computational neuroscience, and behavior. The goal of the program is to provide students with broad educational and research opportunities in a highly interactive and collegial environment.

Year 4: Dissertation research. The preliminary exam (if not taken in Year 3) will be taken upon completion of all course prerequisites.

Year 5: Dissertation research. Clinical experiences are intensified in preparation for clinical years.

Years 6-7: Dissertation is completed and defended. Clinical year 3 (11 months) and year 4 (5 months) take place at UTMB Austin and/or UTMB Galveston.

STANDARD SEQUENCE OF STUDY

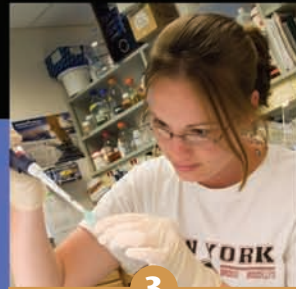


1

MEDICAL SCHOOL IN GALVESTON with Summer Research rotations at UT Austin



2



3

DISSERTATION RESEARCH IN AUSTIN



4

Clinical Integration and Topics in Translational Research



5



6

CLINICAL ROTATIONS in Austin and/or Galveston



7

The MD-PhD Dual Degree Program of the University of Texas at Austin and the University of Texas Medical Branch offers a unique opportunity for students who seek a career at the interface of medicine and research. Students accepted to the MD-PhD Dual Degree Program may choose PhD studies from five programs, with over 150 research faculty in these programs.

Biomedical Engineering

Biochemistry

Cell & Molecular Biology

Chemistry

Neuroscience

The research disciplines available to trainees in this program include biomedical engineering, biochemistry, bioinformatics, cell biology, molecular biology, chemistry, microbiology, nanotechnology, neuroscience, physics and many other areas of advanced technology. Emerging scientists with rigorous training as both physicians and research scientists bring rapid advances in the laboratory to the clinical setting.

FINANCIAL SUPPORT

The stipends for MD-PhD students are competitive (\$25,000/yr. in January 2009). Students accepted into the MD/PhD Dual Degree Program receive full support, including Medical School and Graduate School tuition.

ADMISSIONS

Standard Track www.aamc.org/audienceamcas.htm

To apply for admission to the MD-PhD Dual Degree Program standard pathway, an application should be completed on the American Medical Application Service (AMCAS) prior to October 1 of each year. Three letters of recommendation are required, one of which should address applicant's potential as a research scientist.

Select Track www.mdphd.utexas.edu

UT Austin Graduate School Select Admissions Program application for and information about the Dual Degree Program are available on our website.

CONTACT INFORMATION

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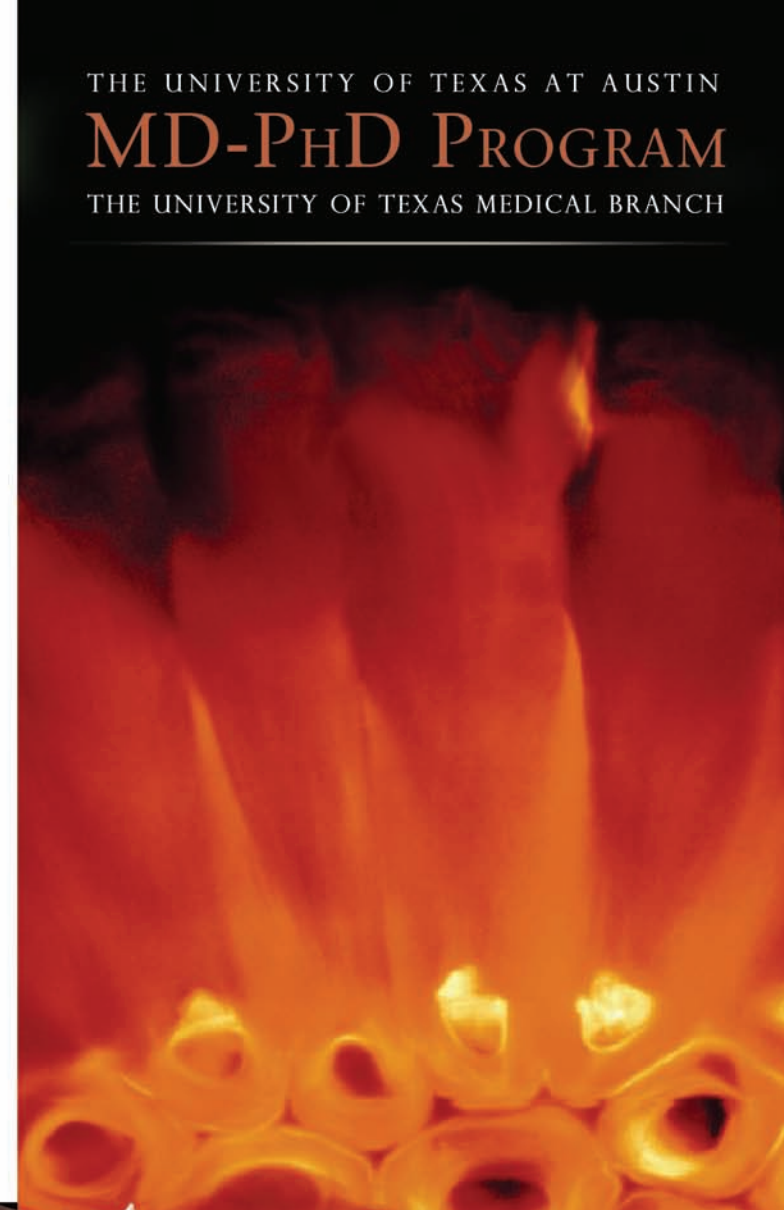
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THE UNIVERSITY OF TEXAS AT AUSTIN
MD-PhD PROGRAM
THE UNIVERSITY OF TEXAS MEDICAL BRANCH



**Discovery consists
of seeing what
everyone else has
seen and thinking
what no one else
has thought.**

~ Hungarian Biochemist Albert Szent-Gyorgyi



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D I S C O V E R Y